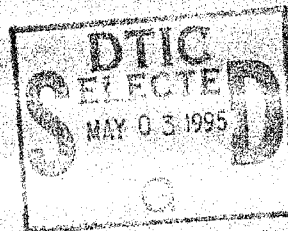


GAO

GAO  
Briefing Report to the Chairman,  
Committee on the Budget, House of  
Representatives

## DEFENSE SECTOR

### Trends in Employment and Spending



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Washington, D.C. 20548

National Security and  
International Affairs Division

B-260487

April 19, 1995

The Honorable John R. Kasich  
Chairman, Committee on  
the Budget  
House of Representatives

Dear Mr. Chairman:

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This report responds to your request for data on (1) the extent of the Department of Defense (DOD) and defense industry downsizing and (2) defense reinvestment and conversion expenditures. We briefed your staff on our findings on February 10, 1995.

In summary, the defense sector, as measured by DOD spending and DOD and defense industry employment, has been shrinking, both in absolute terms and relative to the U.S. economy, since the mid-1980s. Declines in DOD spending and concomitant decreases in defense-related employment have occurred during a period of strong increase in the gross domestic product and in nondefense employment. The defense reinvestment and conversion initiative was established in 1993, in part, to help ease the displacement caused by the defense sector downsizing. However, not all programs were tied directly to DOD cuts. Some individual programs contained in the initiative also have other purposes and will likely continue after the initiative ends in fiscal year 1997.

Overall defense spending and employment peaked in the mid- to late 1980s and have steadily declined since then. The most dramatic drops, and those that have most directly affected the defense industry, have been in the procurement accounts. Defense-related employment—active-duty military personnel, DOD civilian employees, and defense industry employees—has followed the same pattern, peaking in the mid- to late 1980s and declining since then. Defense industry employment has shown a slightly larger decrease than the other components—35 percent since 1987.

The level of defense industry activity and employment will depend in part on the amount of future research and development and procurement spending. DOD expects the decline in procurement spending to bottom out in 1996 and projects a 47-percent increase in procurement budget authority, adjusted for inflation, from the 1996 level by 2001. Presently, however, further reductions in DOD employment and infrastructure are expected. For example, in anticipation of upcoming base closure



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deliberations, DOD has identified infrastructure reductions in addition to the 15 percent of bases designated for closure in earlier rounds.

The 5-year defense reinvestment and conversion initiative, started in 1993, is currently planned to continue through fiscal year 1997 and combines some new and some existing programs. Some programs, such as separation pay, are directly tied to declines in defense spending and are targeted to help individuals and communities cope with cutbacks in military spending. Other programs (1) provide assistance to companies to develop dual-use technologies—that is, technologies with both military and civilian applications or (2) generally support the defense industrial base. In commenting on a draft of this report, DOD pointed out that since dual-use programs have long-term objectives, they will continue after the administration's 5-year initiative ends in 1997.

The estimated cost of the administration's 5-year defense reinvestment and conversion initiative has risen to \$24.1 billion—\$16.7 billion for technology initiatives and \$7.4 billion for worker and community assistance—from the original estimate of \$21.6 billion. Projected spending was higher than initially proposed in each of the first 4 years. Existing programs, such as SEMATECH, a consortium of semiconductor companies, were categorized as being part of the defense reinvestment and conversion initiative after it was announced in March 1993. This accounts for at least part of the spending increase from the initial proposal. The executive branch's fiscal year 1996 budget proposes \$178 million less for fiscal year 1997 than the administration originally planned.

Several indicators of the shrinking defense sector are (1) defense employment relative to total employment and (2) defense spending as a percentage of the gross domestic product. Defense-related employment as a percentage of total U.S. employment reached a peak of 6.2 percent in 1987 and has declined to 3.8 percent in 1995. Similarly, defense spending as a percentage of gross domestic product peaked at 6.5 percent in the late 1980s and has since declined to 4.1 percent.

Although defense spending and the defense industry have declined, the U.S. economy as a whole has expanded. Since the late 1980s, total nondefense-related employment has grown by 12 percent and the nation's gross domestic product has increased by 18 percent. Many analysts forecast continuing growth over the near term.

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## Scope and Methodology

We obtained statistical data on defense spending and defense conversion spending from DOD's Office of the Comptroller. In addition, we obtained information on other defense reinvestment and conversion spending from officials at the Departments of Commerce and Labor and from our ongoing work at the Department of Energy. This information includes estimates of future year requests.

We obtained information on defense spending and defense-related employment from DOD's Office of the Comptroller, except for fiscal years 1996 and 1997 data on defense-related employment in private industry. We estimated these figures from previous years' data. Data on military base closures, including future estimates, were obtained from senior DOD officials.

We performed our work from December 1994 to February 1995 in accordance with generally accepted government auditing standards. We did not obtain written agency comments. However, we discussed the data contained in this briefing report with senior DOD officials. They generally agreed with the information presented, but believed that a fuller presentation of the Department's dual-use technology was warranted. We have made changes where appropriate, but this report is not intended to be a comprehensive review of dual-use technology.

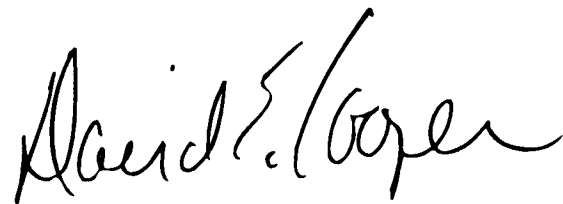
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We are providing copies of this briefing report to the Chairmen, House and Senate Committees on Appropriations, the House Committee on National Security, and the Senate Committee on Armed Services. We are also sending a copy of this report to the ranking minority members of those committees and to the Secretary of Defense. We will provide copies to other interested parties upon request.

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Please contact me at (202) 512-4587 if you or your staff have any questions concerning this report. The major contributors to this briefing report were Katherine V. Schinasi, Thomas P. Hubbs, and Thomas W. Hopp.

Sincerely yours,

A handwritten signature in black ink, reading "David E. Cooper". The signature is fluid and cursive, with the first name "David" being the most prominent.

David E. Cooper  
Director, Acquisition Policy, Technology,  
and Competitiveness Issues



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# Defense Sector

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## GAO Briefing for the House Committee on the Budget

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**Information on (1) Department of  
Defense (DOD) and defense industry  
downsizing and (2) defense  
reinvestment and conversion  
spending**

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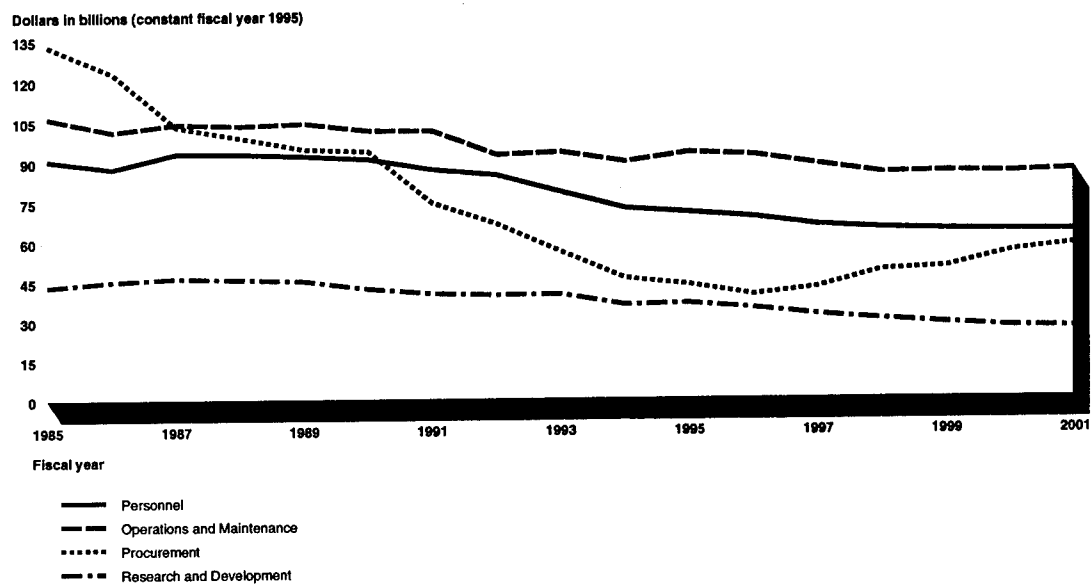
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## GAO Definitions

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- We defined "defense reinvestment and conversion" as the 5-year initiative announced by the administration in March 1993.
  - We defined "spending" as budget authority.
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## GAO DOD Spending by Major Category



Source: U.S. Office of Management and Budget, Budget of the United States Government, fiscal year 1996 and DOD briefing documents.

- Overall, spending decreased by over 35 percent from fiscal years 1985 to 1996. The most pronounced drop occurred in procurement—over 70 percent.
- DOD projects a 47-percent increase in procurement budget authority, adjusted for inflation, from the 1996 level by 2001.

## GAO DOD Spending and Defense-Related Employment



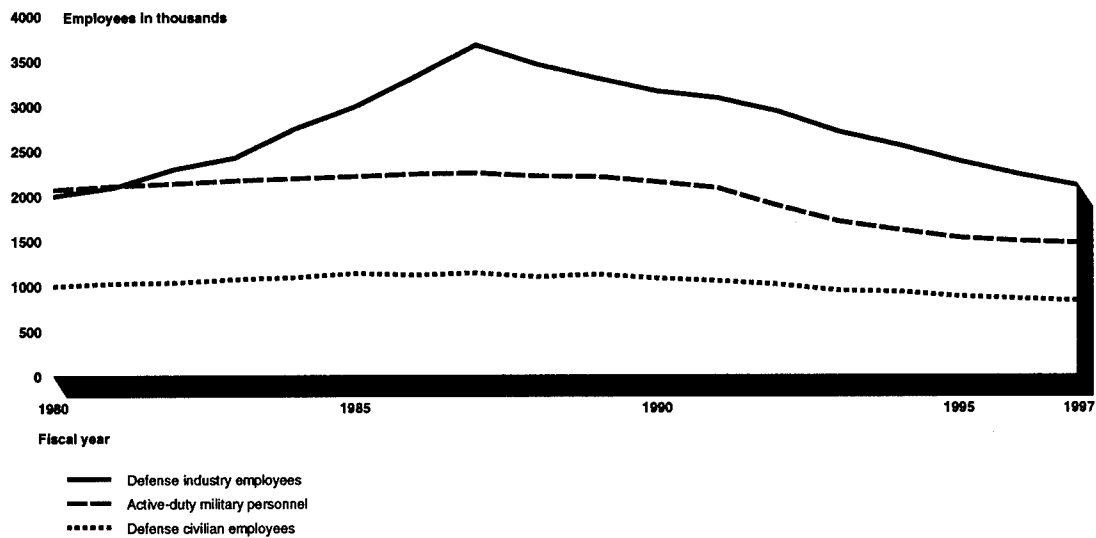
Source: DOD, Office of Comptroller; however, GAO used previous years' data to extrapolate defense industry employees for fiscal years 1996 and 1997.

Note: Defense-related employment includes active-duty military, DOD civilian employees, and defense industry employees.

- DOD's budget authority and defense-related employment reached their highest levels in the mid- to late 1980s and have declined since then.

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- Data on defense-related industry employment is reported on a biannual basis by the Department of Labor's Bureau of Labor Statistics. The next report, expected in spring 1995, will update projections through fiscal year 1998.

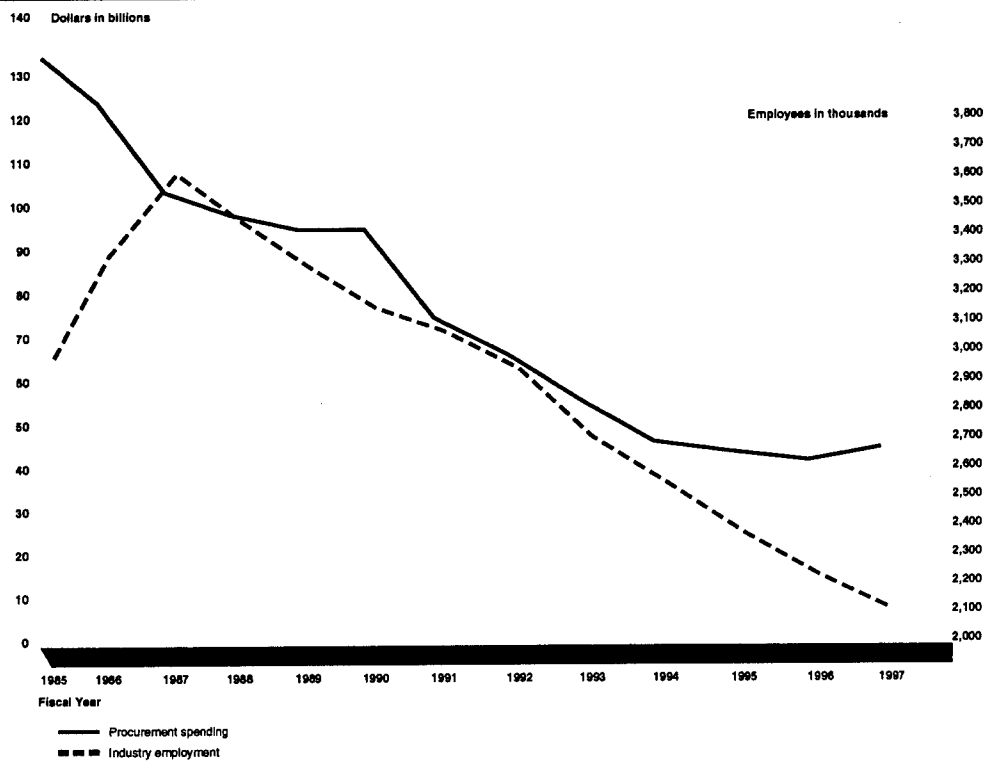
## GAO Defense-Related Employment (FY 1980-97)



Source: DOD, Office of Comptroller; however, GAO used previous years' data to estimate private industry employees for fiscal years 1996 and 1997.

- Total defense-related employment peaked at about 7 million workers in 1987 and declined to an estimated 4.8 million in 1995, a 32-percent decrease. Defense industry employment decreased by about 35 percent from the 1987 peak but is still higher than in 1980.

## GAO DOD Procurement Spending and Industry Employment



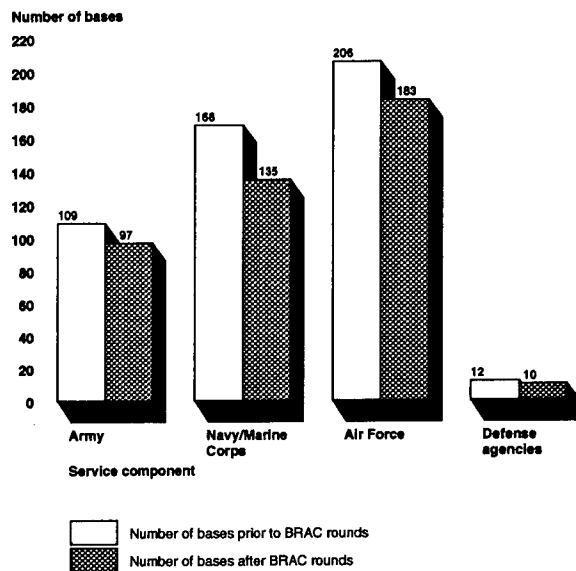
Source: DOD, Office of Comptroller.

- Procurement budget authority is expected to decrease by over 70 percent from fiscal years 1985 to 1996.
- Defense procurement spending decreased by over 65 percent from its 1985 peak, and defense industry employment decreased by 35 percent from its 1987 peak. The Department of Labor estimates that defense industry employment will continue to decrease for the next 2 years.

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- Since actual expenditures lag behind budget authority, employment may continue to decrease even as DOD expenditures begin to increase in 1996.



## GAO Major Domestic Defense Base Closures

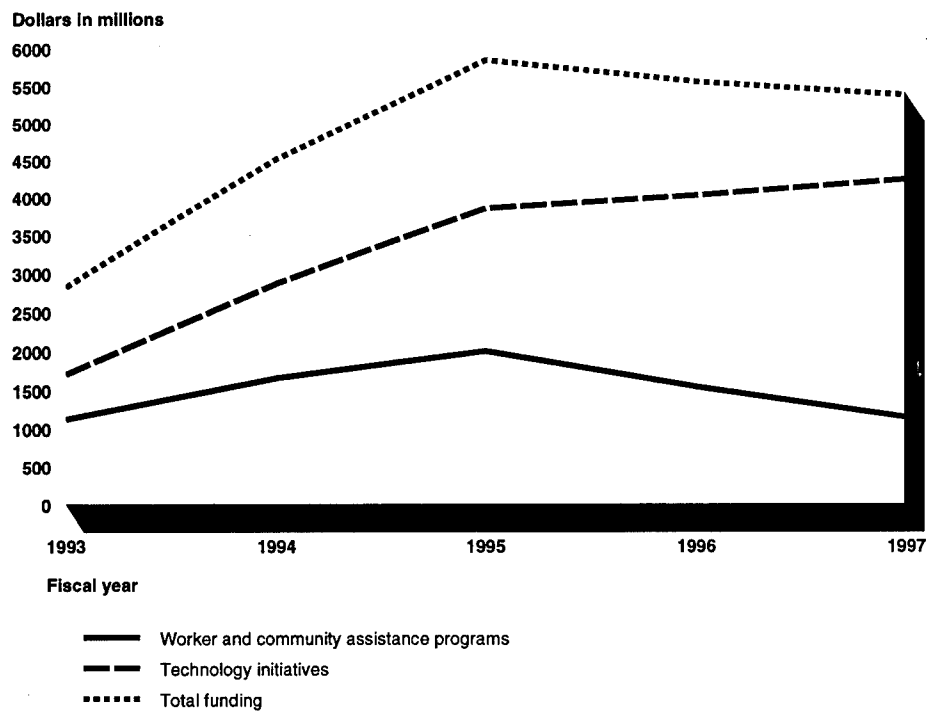


Source: DOD, Office of Economic Security.

Note: BRAC is the Defense Base Realignment and Closure Commission.

- To date, BRAC actions (1988, 1991, and 1993) represent a 15-percent reduction in the number of facilities, from 495 to 425. DOD anticipates additional closings as a result of BRAC 1995.

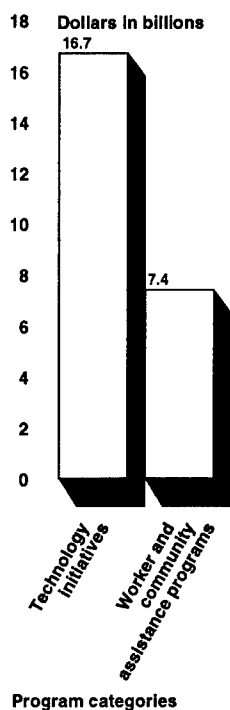
## GAO Five-year Defense Reinvestment and Conversion Initiative



Source: Budget of the United States Government, fiscal year 1995, DOD and the Departments of Commerce, Energy, and Labor.

- In March 1993, the administration announced a governmentwide 5-year, \$21.6-billion defense reinvestment and conversion initiative for fiscal years 1993 through 1997.
- Assistance programs include separation benefits, education and training, and economic adjustment planning grants to communities affected by defense downsizing.
- Technology initiatives include long-term dual-use high-technology investments. Spending for technology initiatives associated with defense reinvestment and conversion for all government programs is expected to peak at \$4.2 billion in fiscal year 1997.
- Governmentwide funding for worker and community assistance programs increased for the first 3 years and then declined. Governmentwide funding for technology initiatives has continually increased, and DOD said its program funding will continue beyond the 5-year initiative.

## GAO Defense Reinvestment and Conversion by Category (Totals, FY 1993-97)



Source: Budget of the United States Government, fiscal year 1995, DOD and the Departments of Commerce, Energy, and Labor.

- About 30 percent of the defense reinvestment and conversion funding is targeted to people and communities that are affected by defense downsizing, including military base closures and defense industry layoffs.

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- About 70 percent of the funding supports technology initiatives. These include broader objectives of developing dual-use technologies and generally supporting the defense industrial base.

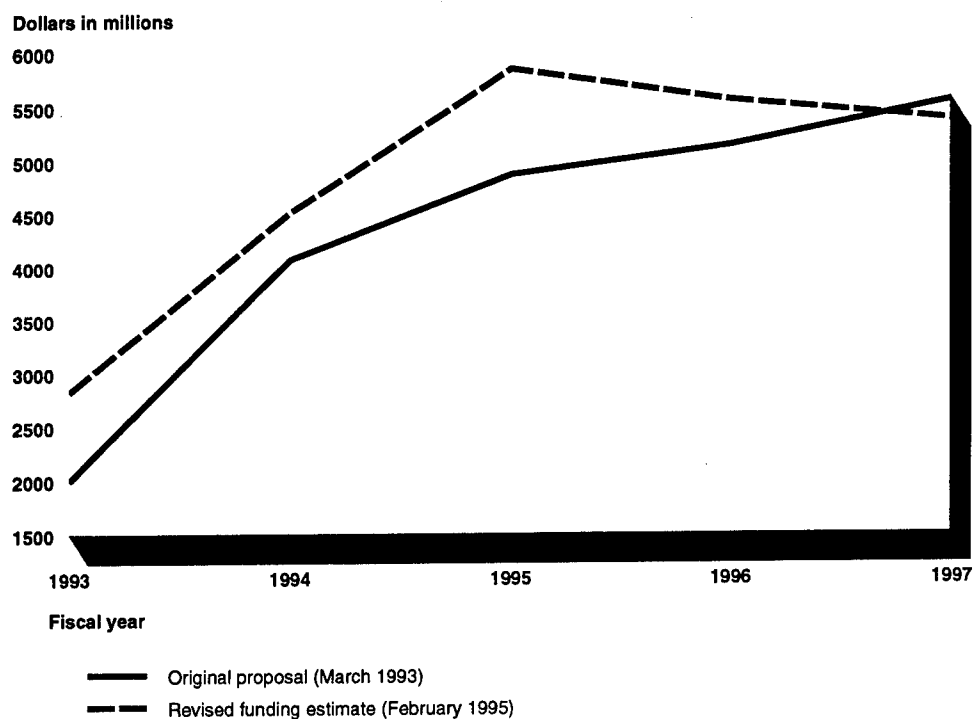
# GAO Defense Reinvestment and Conversion by Program

|  | 1993    | 1994    | 1995    | 1996    | 1997    | Total    |
|--|---------|---------|---------|---------|---------|----------|
| Worker and community assistance programs                       |         |         |         |         |         |          |
| Department of Commerce-community diversification assistance    | 0       | 900     | \$120   | \$120   | \$120   | \$440    |
| Department of Defense-personnel assistance & community support | \$1,027 | 1,360   | 1,750   | 1,314   | 917     | 6,367    |
| Department of Energy-worker & community transition             | 82      | 100     | 115     | 100     | 100     | 507      |
| Department of Labor-workforce security                         | 0       | 121     | 0       | 0       | 0       | 121      |
| Subtotal   | \$1,110 | \$1,661 | \$1,964 | \$1,634 | \$1,137 | \$7,435  |
| Technology initiatives   |         |         |         |         |         |          |
| Defense dual-use: Technology Reinvestment Project              | \$581   | \$486   | \$443   | \$600   | \$400   | \$2,398  |
| Defense: other dual-use  | 1,141   | 1,411   | 1,620   | 1,465   | 1,391   | 7,028    |
| New federal high-tech investments (conversion opportunity)     | 0       | 907     | 1,734   | 2,064   | 2,444   | 7,139    |
| Other assistance   | 0       | 50      | 50      | 0       | 0       | 100      |
| Subtotal   | \$1,702 | \$2,963 | \$3,947 | \$4,019 | \$4,235 | \$16,866 |
| Total  | \$2,812 | \$4,624 | \$5,911 | \$5,653 | \$5,372 | \$24,101 |

Source: Departments of Commerce, Energy, Labor, and DOD.

- These programs represent the defense reinvestment and conversion initiative as defined by the administration.
- Over 55 percent of technology initiative funding is for defense dual-use programs.
- Funding has been provided through DOD and the Departments of Commerce, Energy, and Labor.

## GAO Defense Reinvestment and Conversion Initial and Revised Funding Estimates



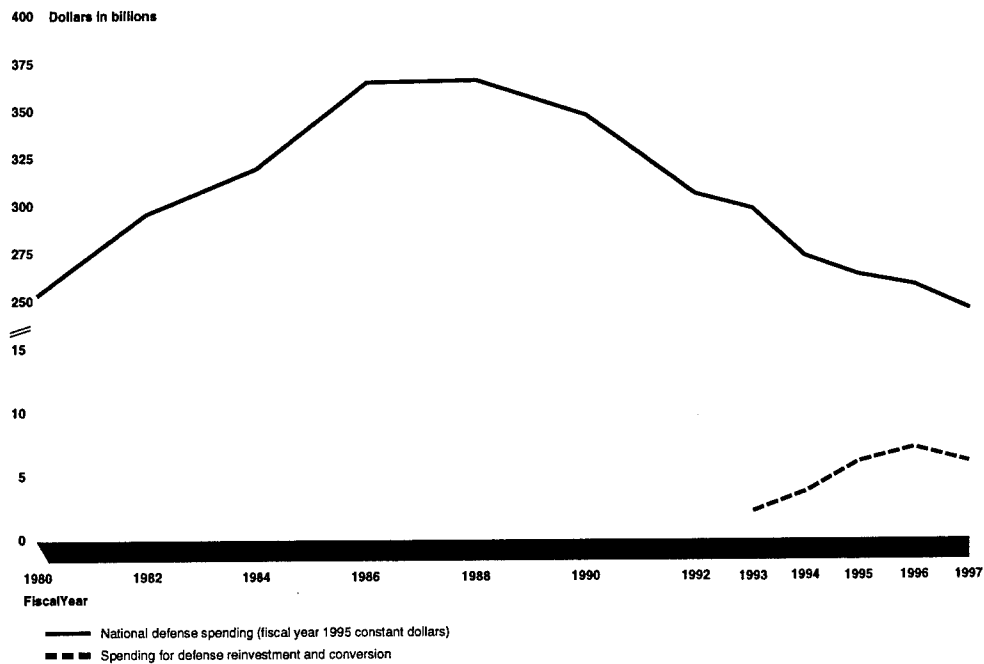
Source: Initial Proposal (March 1993) - Office of Management and Budget. Revised Funding Estimates (February 1995) - Departments of Commerce, Labor, Energy, and DOD.

- Projected spending was higher than initially proposed for each of the first 4 years of the defense reinvestment and conversion program. In the fiscal year 1996 budget, the administration is requesting \$178 million less for fiscal year 1997 than originally anticipated.

- 
- Existing programs, such as SEMATECH, were categorized as being part of the defense reinvestment and conversion initiative after it was announced in March 1993. This accounts for at least part of the spending increase since the initial proposal.



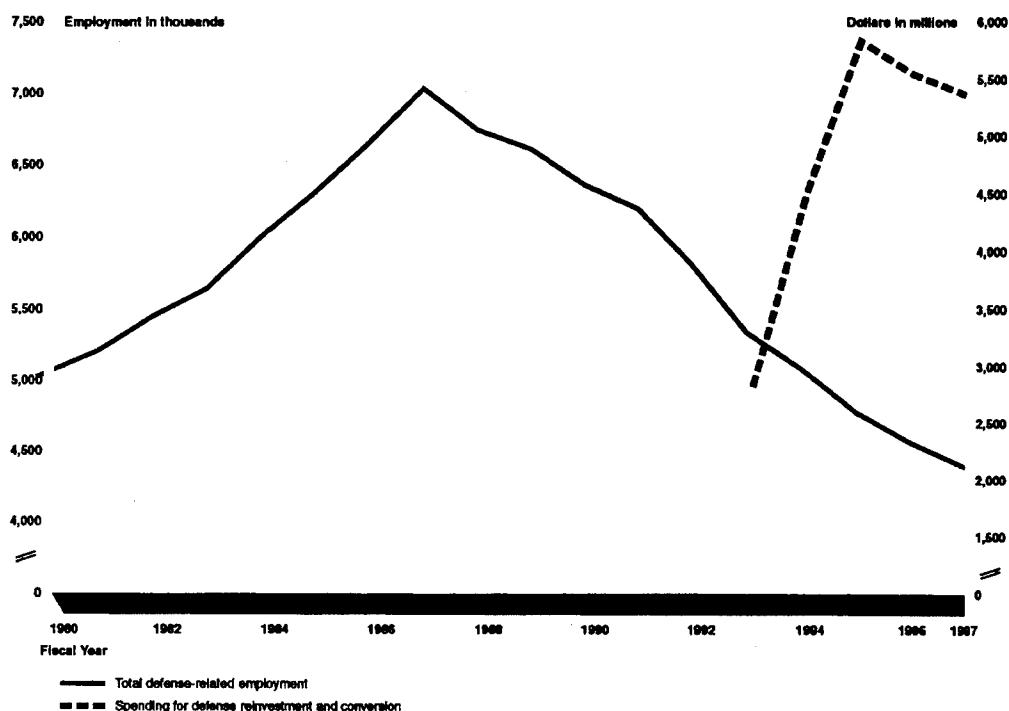
## GAO DOD Spending and 5-year Defense Reinvestment



Source: DOD, for national defense spending; and the Departments of Commerce, Energy, Labor, and DOD for defense reinvestment and conversion spending.

- Programs within the defense reinvestment and conversion initiative were to mitigate the impacts of decreases in defense spending.

## GAO Defense Employment and Reinvestment/Conversion

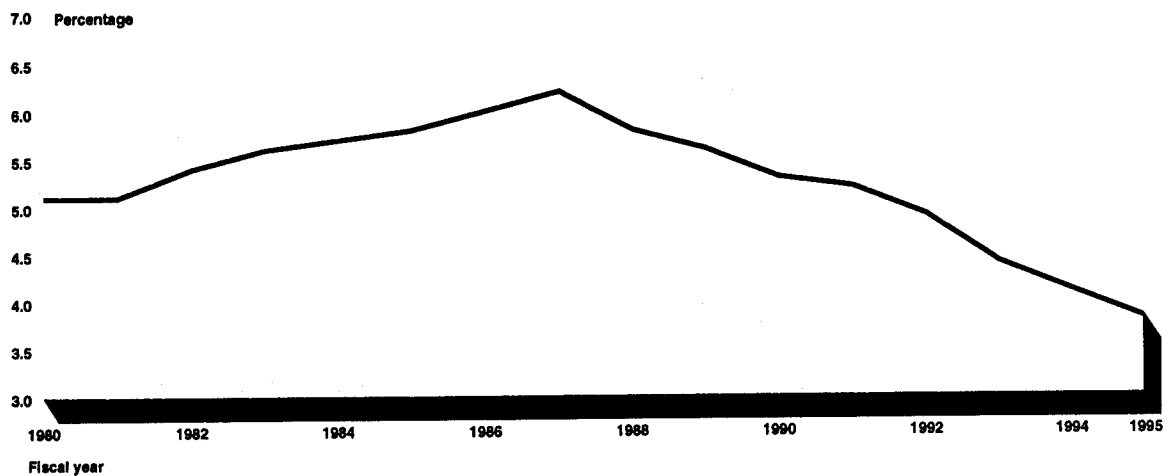


Source: DOD, Office of Comptroller; however, GAO used previous years' data to extrapolate defense industry employees for fiscal years 1996 and 1997.

Note: Defense-related employment includes active-duty military, DOD civilian employees, and defense-related private industry employees.

- Programs within the defense reinvestment and conversion initiative were to mitigate the impacts of decreases in defense-related employment. Some are mandated separation benefits.

## GAO Defense Employment as Percentage of Total Employment (FY 1980-95)

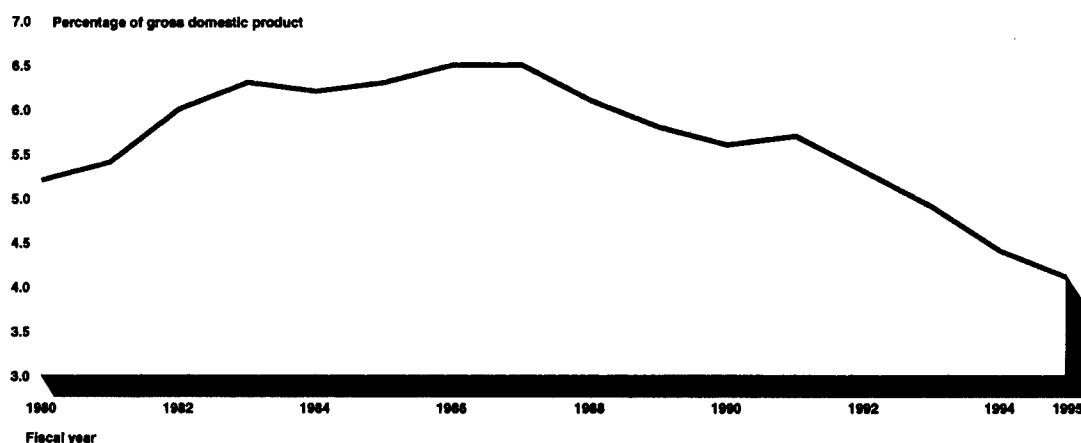


Source: DOD, Office of Comptroller.

Note: Total defense-related employment includes active-duty military, DOD civilian employees, and defense-related private industry employees.

- Defense employment as a percentage of overall employment peaked at 6.2 percent in fiscal year 1987 and has steadily decreased to an estimated 3.8 percent in fiscal year 1995.

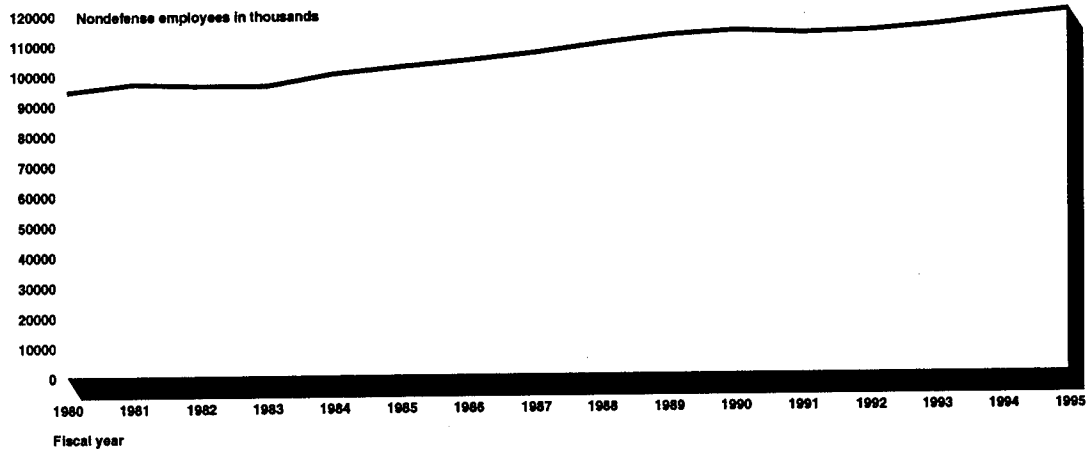
## GAO Defense Spending as Percentage of Gross Domestic Product (FY 1980-95)



Source: DOD, Office of Comptroller.

- Defense spending as a percentage of the gross domestic product peaked at 6.5 percent in fiscal years 1986 and 1987 and has declined to an estimated 4.1 percent in fiscal year 1995.

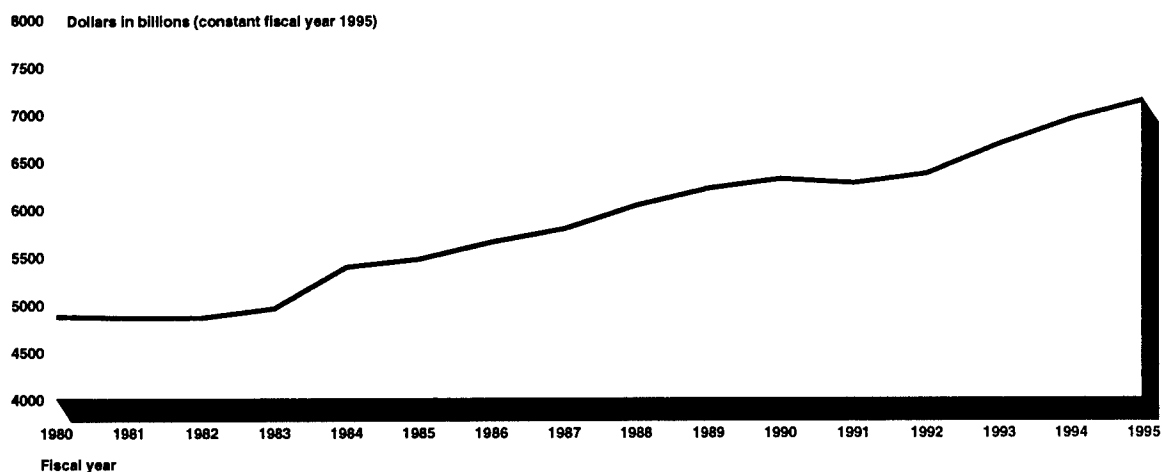
## GAO Growth in Nondefense-Related Employment (FY 1980-95)



Source: Department of Labor.

- Nondefense-related employment grew from 106.5 million workers to 119.5 million, a 12-percent increase from fiscal year 1987 to fiscal year 1995.

## GAO Gross Domestic Product (FY 1980-95)



Source: DOD, Office of Comptroller.

- The gross domestic product grew from \$5.8 trillion to \$7.1 trillion, an 18-percent increase from fiscal year 1987 to fiscal year 1995.